

which compiles the control program into codes directly executable by a universal microprocessor that includes an acceleration unit, such as pipeline logic and a cache.

32. (Amended) A programmable controller which performs sequential processing in accordance with a control program described with a sequential-control language, such as a ladder diagram or instruction list, said programmable controller comprising:

a storing unit which stores the control program;

an instruction counting unit which counts the appearance frequency of each instruction used for the control program;

a pattern-matching-table generating unit which generates a pattern-matching table in which instructions are listed starting with the highest appearance frequency in accordance with results counted by the instruction-counting unit;

an interpreting unit which executes the control program while pattern-matching the instructions listed in the pattern-matching table in order and interpreting the control program into codes directly-executable by the programmable controller; and

a control-program-development supporting apparatus that develops a control program described with a sequential-control language such as a ladder diagram or instruction list, the control-program-development supporting apparatus having a compiler which compiles the control program into codes directly executable by a universal microprocessor that includes an acceleration unit, such as pipeline logic and a cache.

IN THE ABSTRACT:

Replace the Abstract with:

ABSTRACT OF THE DISCLOSURE

A programmable controller includes a universal microprocessor. This universal microprocessor incorporates an acceleration section. The control-program-development supporting apparatus generates an execution code directly executable by the universal microprocessor. Thereby, the acceleration section executes sequential processing.